Health and Safety
Executive

HSE

Use of Standards in the UK Offshore Oil & Gas Regulatory Regime

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Piper Alpha, UKCS, 1988

UKCS Legislation (1)

- Offshore Installations Safety Case Regulations
  - Design & Relocation Notifications
  - Safety Case
  - Combined Operations Notifications
  - Well Operations Notification
  - Verification

UKCS Legislation (2)

- **Prevention of Fire and Explosion, and Emergency Response Regulations**
  - Assess major accident risks
  - Establish performance standards for EER ‘measures’ and other ‘measures’ to protect people from F&E
  - Plan and prepare for emergencies
  - Take ‘appropriate measures’ to prevent F&E
  - Take ‘appropriate measures’ to detect incidents
  - Make ‘appropriate measures’ for communication
  - Take ‘appropriate measures’ to limit the extent of an incident (escalation)
  - Take ‘appropriate measures’ to protect people (mitigation)
  - Make ‘appropriate provision’ for muster and safe egress
  - Make arrangements for evacuation and escape
  - Make arrangements for recovery and rescue
  - Provide protective equipment (PPE) for use in an emergency
  - Ensure plant and equipment for PFEER is ‘suitable’ and maintained in ‘efficient state, working order and good repair’
  - Ensure life saving appliances are suitable
  - Inform ‘all persons’ regarding PFEER arrangements and equipment

UKCS Legislation (3)

- **Design & Construction Regulations**
  - Structural integrity throughout lifecycle
  - Well integrity throughout lifecycle
    - So that ‘so far as is reasonable practicable there can be no unplanned escape of fluids from the well’
  - ‘Suitable’ well control equipment to protect against blowouts
  - Arrangements for ‘independent and competent’ well examination
  - Weekly report to be sent to HSE

UKCS Legislation (4)

- **Other legislation including:**
  - Health & Safety at Work etc. Act
  - Management of Health & Safety at Work
  - Offshore Management and Administration
  - Safety Reps & Safety Committees
  - Noise, Electricity, Pressure Systems,
  - Lifting Equipment (LOLER)
  - Pipelines, Diving
  - Control of Hazardous Substances (COSHH)
  - EU Product Safety (Machinery, Electrical, ATEX, Pressure Equipment, …….)

Major Hazards Safety Regulation

- Aim is to ensure that enough is being done to prevent such events
  - without being unduly restrictive
  - keeping within legal powers
- Principal duty is on the operating company
- But others have a part to play
  - Suppliers
  - Integrators
  - Individuals
  - Regulators

Regulatory Tools

- Safety Cases
- Inspection
- Investigation
- Intervention
- Enforcement (of the Law)
- Sharing learning & ‘good practice’

Standards have a part to play in all of these

A **standard** is a document, established by consensus and approved by a recognized body, that provides, for common and repeated use, rules, guidelines or characteristics for activities or their results, aimed at the achievement of the optimum degree of order in a given context. (IEC)

Standards Bodies

- ISO, IEC
- CEN, CENELEC
- National Standards Organisations
  - eg BSI, ANSI

Others

- API
- NFPA
- IMO
- Energy Institute
- EEMUA
- Oil and Gas UK
- Oil and Gas Producers Assoc. (OGP)

A ‘good’ safety standard

- Clear requirements based on sound technical criteria
- Defines what is ‘reasonably practicable’
- Captures experience (particularly from incidents)
- Doesn’t restrict technological development
- Doesn’t ‘gold plate’ – good practice not best practice
- Has had input comment from all stakeholders

Challenges for regulators

- Extent of involvement
- How to influence
- Priorities and resources
- Risk based approaches
- Do standards address the things that cause the incidents?
- Uniformity / consistency

Thank You!

Questions?